

GENERAL NOTES:

1. THE CONTRACTOR IS ENCOURAGED TO VISIT THE SITE PRIOR TO SUBMITTING BID.
2. ELEVATIONS ARE BASED ON NAVD--88 (92 ADJUSTED)(NORTH AMERICAN VERTICAL DATUM). BENCH MARKS ARE SHOWN ON DWG. XXX AND PLAN SHEETS.
3. BORING LOCATIONS ARE SHOWN ON DWG. XXX.
4. FIELD ENGINEERING INFORMATION: ALL REQUESTS FOR INSPECTIONS, AND FIELD CONSTRUCTION INFORMATION SHOULD BE DIRECTED TO: CHIEF OF CONSTRUCTION, LARRY KIGHT, 823--1013
5. PRIOR TO THE SCHEDULING OF A PRE-CONSTRUCTION CONFERENCE, THE CONTRACTOR SHALL SUBMIT A PRELIMINARY DETAILED TRAFFIC CONTROL PLAN FOR REVIEW BY THE DIVISION OF TRAFFIC ENGINEERING, DEPARTMENT OF PUBLIC WORKS. THE TRAFFIC CONTROL PLAN AS WELL AS ALL TRAFFIC CONTROL DEVICES UTILIZED ON THE PROJECT MUST COMPLY WITH THE "FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) FOR STREETS AND HIGHWAYS. FOLLOWING APPROVAL OF THE PLAN, A REPRODUCIBLE DRAWING SHALL BE SUBMITTED TO THE FIELD ENGINEERING OFFICE FOR USE AND DISTRIBUTION.
6. SUBMITTALS ON MATERIALS FOR THIS PROJECT SHALL BE APPROVED BY THE FIELD ENGINEERING OFFICE PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR TO USE APPROVED PRODUCTS LIST WHERE EVER POSSIBLE.
7. A CONSTRUCTION SCHEDULE SHALL BE SUBMITTED TO THE FIELD ENGINEERING OFFICE, PRIOR TO THE SCHEDULING OF THE PRE--CONSTRUCTION CONFERENCE.
8. ALL WORK WITHIN THE RIGHT OF WAY SHALL COMPLY WITH THE CITY OF NORFOLK RIGHT OF WAY EXCAVATION & RESTORATION MANUAL, (ORDINANCE NO. 40,778), DEPT. OF PUBLIC WORKS, DIVISION OF TRANSPORTATION. THE DOCUMENT MAY BE DOWNLOADED AT <http://www.norfolk.gov/PublicWorks/>
9. THERE MAY BE A C.B.D. TRAFFIC CONTROL SYSTEM IN THIS AREA. FOR PROTECTION OF THIS SYSTEM, PHONE THE PUBLIC WORKS DEPARTMENT BEFORE STARTING WORK: 664--7300
10. CONTRACTOR SHALL CONFORM TO THE "OVERHEAD HIGH VOLTAGE ACT" (EFFECTIVE JULY 1, 1989) AND SHALL CONTACT THE NECESSARY AUTHORITIES PRIOR TO START OF CONSTRUCTION.
11. THE DEPARTMENT OF UTILITIES WILL OBTAIN ALL NECESSARY TREE PERMITS. THE CONTRACTOR SHALL CONFORM TO ALL REQUIREMENTS OF THE "CITY OF NORFOLK TREE ORDINANCE" (EFFECTIVE FEBRUARY 15, 2005).
12. CONTRACTOR TO NOTIFY THE UTILITIES INSPECTOR ON FIRST IDENTIFICATION OF CONFLICT WITH STORMWATER INFRASTRUCTURE.
13. STATE LAW MANDATES THE NOTIFICATION OF UTILITY OWNERS 48 HOURS IN ADVANCE OF EXCAVATION. FOR LOCATION OF UTILITIES, CALL "MISS UTILITY" AT 1--800--552--7001 FOR: WATER & SEWER H.R.S.D. VERIZON TELEPHONE DOMINION VA. POWER VA. NATURAL GAS TRAFFIC CONTROLS STORM DRAIN COX CABLE T.V.
14. THE CONTRACTOR SHALL BE REQUIRED AND AGREES TO COMPLY WITH ALL THE PROVISIONS OF THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" (SECTION 56--265.14 et seq., CODE OF VIRGINIA, 1950, AS AMENDED) AND HEREBY AGREES TO HOLD THE CITY OF NORFOLK HARMLESS AGAINST ANY LOSS, DAMAGES, OR CLAIMS OF ANY NATURE WHATSOEVER ARISING OUT OF THE CONTRACTOR'S FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS ACT.
15. CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE, ANY DAMAGE DONE TO THE UTILITIES SHALL BE IMMEDIATELY REPAIRED AT CONTRACTOR'S EXPENSE.
16. EXISTING UTILITIES SHOWN ARE BASED ON AVAILABLE RECORDS AND FIELD SURVEYS, AND IS NOT GUARANTEED TO BE EXACT OR COMPLETE. CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES IN ADVANCE OF CONSTRUCTION.
17. CONTRACTOR SHALL HAVE A SET OF PROJECT PLANS AND SPECIFICATIONS ON SITE AT ALL TIMES. IN ADDITION THE CONTRACTOR SHALL HAVE IN HIS POSSESSION THE CURRENT EDITION OF THE HRPDC SPECIFICATIONS.
18. CITY WILL ACCEPT SAND OR STONE TICKETS ONLY ON THE DAY THE MATERIAL IS DELIVERED TO THE JOB SITE. TICKETS WILL NOT BE ACCEPTED WITH MONTHLY PAY ESTIMATE, NO EXCEPTIONS.
19. THE CONTRACTOR SHALL VERIFY TYPE OF MATERIAL, OUTSIDE DIAMETER AND LOCATION OF ALL PIPES BEING CONNECTED TO, IN ORDER TO INSURE PROPER FITTINGS ARE AVAILABLE AND TO MINIMIZE OUT OF SERVICE TIME FOR CONNECTIONS. ALL NECESSARY FITTINGS NEEDED TO MAKE CONNECTIONS SHALL BE CHECKED BY THE CITY'S INSPECTOR PRIOR TO ANY CONNECTION WORK.
20. ANY TIE-INS TO EXISTING LINES THAT WILL RESULT IN INTERRUPTION OF SERVICE TO ANY CUSTOMER MUST BE COORDINATED WITH THE CITY OF NORFOLK AS TO ACCEPTABLE TIME AND DURATION OF INTERRUPTION. SCHEDULED INTERRUPTIONS OF SERVICE (TIE-INS, ABANDONMENTS, ETC.) REQUIRE 3 DAYS ADVANCE NOTICE FOR A TRIAL SHUTDOWN. AN ADDITIONAL 3 DAYS ADVANCE NOTICE WILL BE REQUIRED FOR THE ACTUAL SHUTDOWN IF THE TRIAL SHUTDOWN IS SUCCESSFUL.
21. ALL TEES, BENDS, PLUGS AND VALVES SHALL BE PROVIDED WITH MECHANICAL THRUST RESTRAINT AND RESTRAINED TO PROPER LENGTH. PLUGS INSTALLED ON ACTIVE WATER MAINS SHALL BE RESTRAINED. ENDS OF EXISTING LINES TO BE ABANDONED SHALL BE CAPPED WATER--TIGHT.
22. MECHANICAL THRUST RESTRAINT SHALL BE USED ON ALL BENDS AND FITTINGS WHEN WATER MAINS ARE OFF--SET. WATER MAINS MAY BE ROLLED UNDER STORM DRAINS WITHOUT FITTINGS WHEN THE VERTICAL GRADE CHANGE IS 2 FEET OR LESS.
23. NO PIPE FOLD--INS SHALL BE USED ON WATER MAINS OR SEWER FORCE MAINS. SLEEVES WILL BE USED.
24. WHERE WATER MAINS PASS OVER SEWER MAINS, THEY MUST BE 18 INCHES ABOVE, OR THE SEWER MUST BE A 20 FOOT SECTION OF AWWA APPROVED PRESSURE PIPE. WHERE WATER LINES PASS BELOW SEWER, 18 INCHES OF CLEARANCE IS REQUIRED AND SEWER MUST BE CONSTRUCTED OF AWWA APPROVED PRESSURE PIPE (18 FOOT LONG PICE MINIMUM) CENTERED ON WATER MAIN PIPE SECTION.
25. NEOPRENE PADS SHALL BE USED BETWEEN PROPOSED MAIN AND EXISTING. UTILITIES AT CROSSINGS WHERE THE VERTICAL CLEARANCE IS LESS THAN SIX (6) INCHES.
26. ALL SANITARY SEWER DUCTILE IRON PIPE SHALL BE LINED WITH PROTECTO 401 OR APPROVED EQUAL.
27. FOR WORK IN THE CITY OF NORFOLK RIGHT OF WAY, CONTACT 48 HOURS IN ADVANCE.
- DIVISION OF TRANSPORTATION (PERMITS)  
DIVISION OF ENVIRONMENTAL STORM WATER  
DEPARTMENT OF PARKS AND URBAN FORESTRY  
CONSTRUCTION PERMITS

664--7300  
823--4000  
823--4023  
664--6565
28. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING DISTURBED AREAS TO THEIR ORIGINAL CONDITION. ANY UTILITY WORK REQUIRED TO BE PERFORMED OUTSIDE CITY RIGHT OF WAY OR EASEMENTS SHALL BE COMPLETED BY A LICENSED PLUMBING CONTRACTOR, WITH APPROVED PLUMBING PERMIT. ALL WORK ON PRIVATE PROPERTY MUST BE COORDINATED WITH PARKS & URBAN FORESTRY PRIOR TO CONSTRUCTION. TRENCHES FOR PRIVATE PROPERTY SEWERS WILL NOT BE ALLOWED TO BE LEFT OPEN OVERNIGHT. NO EXCEPTIONS.
29. THE CONTRACTOR SHALL REPLACE ALL DAMAGED OR REMOVED SIDEWALKS DAILY. THE TEMPORARY SIDEWALK SHALL BE A MINIMUM OF 1" COLD MIX OVER COMPACTED SUBGRADE AND SLOPED TO PROVIDE POSITIVE DRAINAGE. THE PERMANENT SIDEWALK REPLACEMENT SHALL BE IN ACCORDANCE WITH CURRENT CITY STANDARDS AND SHALL BE REPLACED TO THE NEAREST JOINT. CRUSHED CONCRETE WILL NOT BE ALLOWED FOR TEMPORARY SIDEWALKS OR DRIVEWAYS.

30. THE CONTRACTOR SHALL PROVIDE TEMPORARY DRIVEWAY AND PARKING ACCESS FOR ALL ADJACENT PROPERTY OWNERS DURING PERIODS WHEN CONSTRUCTION IN THE AREA IS NOT IN PROGRESS. THE CONTRACTOR SHALL OBTAIN DRIVEWAY PERMITS FROM THE DEPARTMENT OF PUBLIC WORKS, TRAFFIC ENGINEERING, FOR ALL REQUIRED DRIVEWAY WORK.
31. THE CONTRACTOR SHALL NOTE THAT THERE MAY BE OTHER CONSTRUCTION IN THIS AREA. THE CONTRACTOR SHALL COOPERATE WITH THE CITY AND ANY OTHER CONTRACTORS OR UTILITY OWNERS TO PREVENT DELAYS TO EITHER PROJECT. IF THE CONTRACTOR NEEDS TO PERFORM WORK OUT OF SEQUENCE OR ADJUST HIS SCHEDULE TO ACCOMMODATE OTHER WORK IN THE PROJECT AREA, IT SHALL NOT BE THE BASIS OF A CLAIM FOR DELAY AGAINST THE CITY.
32. FLOWABLE FILL IS NOT AN APPROVED MATERIAL FOR USE IN THE CITY OF NORFOLK FOR BACKFILL WITHOUT PRIOR APPROVAL. THE SELECT MATERIAL AND No. 21A STONE WILL BE IN ACCORDANCE WITH THE 2002 VDOT ROAD AND BRIDGE SPECIFICATIONS. FOR BACKFILL AROUND THE PIPE USE SELECT MATERIAL (SECTION 207) -- TYPE I AND 20 CBR COMPACTION; FOR THE SUB BASE MATERIAL USE 6" MIN. VDOT No. 21A STONE IN ACCORDANCE TO SECTION 208.
33. RIGHT OF WAY EXCAVATION PERMITS ARE REQUIRED TO PERFORM SEWER AND WATER MAIN INSTALLATION AND ALL APPURTENANCES. PLEASE CONTACT THE RIGHT OF WAY PERMIT OFFICE AT 664--7306 OR AT "[www.norfolk.gov/publicworks/row](http://www.norfolk.gov/publicworks/row)"

SHEETING:

34. CONTRACTOR TO USE VERTICAL TIGHT SHEETING FOR CUTS FIVE FEET OR DEEPER, UNLESS PERMISSION TO DO OTHERWISE IS GRANTED BY THE ENGINEER. SHEETING SHALL ALSO BE USED FOR CUTS BEHIND CURBS OR SIDEWALKS, AND BESIDE ROADWAYS FOR CUTS FIVE FEET OR LESS; AS REQUIRED BY THE ENGINEER. SHEETING SHALL BE USED TO PROTECT EXISTING UTILITIES OR OTHER STRUCTURES SUCH AS DRAINS, PIERS, POWER AND TELEPHONE POLES, ETC. SHEETING, WHEN USED, WILL BE DRIVEN 15 INCHES OR MORE BELOW PIPE INVERT, AND TOP OF SHEETING CAN NOT BE LESS THAN EXISTING GROUND ELEVATIONS, UNLESS OTHERWISE APPROVED BY THE ENGINEER. SHEETING WILL BE CUT OFF AND LEFT IN PLACE AS THE ENGINEER MAY DIRECT. PAYMENT FOR SHEETING LEFT IN PLACE WILL BE PAID ON A UNIT BASIS OF 1,000 BOARD FEET MEASUREMENT, TO BE CHECKED BY CONTRACTOR AND VERIFIED BY THE ENGINEER. ANY QUANTITY LESS THAN THE UNIT PRICE WILL BE PAID FOR TO THE CLOSEST FULL 100 BOARD FOOT MEASUREMENT.
- HOUSE TAPS:
35. SEWER LATERALS SHALL BE EXTENDED TO PROPERTY LINES BY CONTRACTOR WHERE DIRECTED BY THE ENGINEER.
36. PRIVATE SERVICE LATERALS BEING REPLACED FROM THE PROPERTY LINE CLEANOUT TO THE BUILDING SHALL BE INSTALLED BY A LICENSED PLUMBING CONTRACTOR APPROVED BY THE CITY.
37. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL HOUSE SERVICE LINES (WATER AND SEWER). CONTRACTOR SHALL NOT DEPEND ON CITY FORCES TO LOCATE SERVICE LINES WHEN IT IS REQUIRED TO RELOCATE WATER METERS, AND SHALL BE RESPONSIBLE FOR ALL TIE--INS OF HOUSE LINES TO NEW METERS.
38. SANITARY SEWER LATERAL LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE ONLY AND ARE NOT GUARANTEED. WHERE LATERAL REPLACEMENTS ARE SHOWN OR REQUIRED BY THE ENGINEER SUCH SHALL BE REPLACED AS FOLLOWS:
- A. PUBLIC PROPERTY (RIGHT OF WAY): 4 INCH SDR 26 FROM THE SANITARY SEWER MAIN TO THE PROPERTY LINE CLEANOUT FOR SINGLE FAMILY OR DUPLEX DWELLINGS AND 4 OR 6 INCH SDR 26 FOR COMMERCIAL AND MULTIPLE DWELLING UNITS TO BE INSTALLED BY THE CONTRACTOR. IF MAIN IS OTHER THAN SDR 26 PIPE, LATERAL PIPE SHALL MATCH TYPE OF PIPE USED FOR MAIN. 6" LATERALS REQUIRE SQUARE CLEAN OUT BOXES AT THE PROPERTY LINE.

B. PRIVATE PROPERTY: SEWER LATERAL PIPE ON PRIVATE PROPERTY SHALL COMPLY WITH THE PLUMBING CODE. LINE CLEANOUTS SHALL BE INSTALLED. THE PRIVATE PROPERTY LATERAL, INCLUDING PRIVATE CLEANOUT(S), SHALL BE INSTALLED BY LICENSED PLUMBER. REROUTING WILL BE ALLOWED SUBJECT TO THE APPROVAL OF THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL SANITARY SEWER LATERALS (PUBLIC AND PRIVATE) AND SHALL NOT DEPEND ON CITY FORCES TO LOCATE SUCH.
39. ALL EXISTING WATER SERVICES WITHIN THE CITY RIGHT OF WAY WHICH ARE CONNECTED TO WATER MAINS ABANDONED UNDER CONTRACT SHALL BE REPLACED. SERVICE REPLACEMENT SHALL BE FROM THE NEW MAIN TO THE EXISTING METER AND SHALL INCLUDE TAPPING SADDLE (4" PVC ONLY), CORPORATION STOP, COPPER TUBING AND METER STOP. IN ADDITION, EMPTY METER BOXES IN FRONT OF BUILDABLE LOTS SHALL BE PROVIDED WITH SERVICE REPLACEMENT. WATER SERVICES TO BE BORED UNLESS DIRECTED BY THE ENGINEER.

SANITARY AND WATER SERVICES:

40. THE LOCATIONS OF EXISTING AND/OR PROPOSED SEWER LATERALS, PRIVATE PROPERTY LINE CLEANOUTS AND WATER METER RELOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE, BASED ON CURRENT RECORDS AND PRELIMINARY FIELD INVESTIGATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING SEWER LATERAL AND WATER SERVICE CONNECTIONS AT THE MAIN, CLEANOUT BOXES, AND WATER METER BOXES, (WHERE APPLICABLE) AND AT THE RESIDENCE PRIOR TO COMPLETING ANY REHAB OR REPLACEMENT WORK. ONCE ALL EXISTING AND ACTIVE SEWER AND WATER CONNECTIONS HAVE BEEN LOCATED, THE CONTRACTOR MUST TOUR THE JOB SITE WITH THE ENGINEER, PLUMBER, AND CITY FORESTER TO DETERMINE THE LOCATION/RELOCATION OF EXISTING SEWER TAPS, LATERAL ALIGNMENTS, METER RELOCATIONS, HAND DIG ZONES, AND EQUIPMENT CLEARANCE PRUNING REQUIREMENTS. WHERE IN THE SOLE OPINION OF THE CITY FORESTER, EXCAVATION WITH A TRENCHER, BACKHOE OR OTHER MECHANICAL EQUIPMENT WITHIN THE CRITICAL ROOT ZONE WOULD LIKELY RESULT IN EXCESSIVE ROOT DAMAGE, HAND DIGGING WILL BE REQUIRED. WHERE FEASIBLE, NEW SERVICES WILL BE PLACED IN A LOCATION WHICH WILL LEAST IMPACT TREE ROOTS AND FACILITATE UTILITY INSTALLATION. THERE SHALL BE NO SANITARY OR WATER SERVICE REPLACEMENTS OR TAP CONNECTIONS PERFORMED AT ANY LOCATION WHERE SERVICE TAP LOCATIONS HAVE NOT BEEN JOINTLY REVIEWED BY THE ENGINEER, CONTRACTOR, PLUMBER, AND CITY FORESTER. AND APPROVED BY THE ENGINEER. HAND DIGGING WILL BE PERFORMED AT NO ADDITIONAL COST TO THE CITY.
41. THE CONTRACTOR SHALL BE RESPONSIBLE FOR GRADING AND LANDSCAPING AROUND SANITARY SEWER CLEANOUTS WHEN SERVICES ARE INSTALLED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR GRADING AND LANDSCAPING AROUND METER BOXES WHEN SERVICES ARE INSTALLED.
42. IF ABANDONED WATER MAIN IS IN CONFLICT WITH NEW SEWER LATERAL, THE ABANDONED MAIN IS TO BE CUT AND PLUGGED AT NO ADDITIONAL COST TO THE CITY.
43. CONTRACTOR SHALL COORDINATE INSTALLATION OF NEW WATER AND SEWER CONNECTIONS WITH THE ABANDONMENT OF EXISTING WATER AND SEWER MAINS. WATER AND SEWER SERVICE SHALL BE MAINTAINED TO ALL RESIDENCES AT ALL TIMES.
44. ALL EXISTING WATER METERS ARE ASSUMED TO BE 5/8" UNLESS OTHERWISE NOTED. CONTRACTOR TO VERIFY METER SIZES BEFORE DISCONNECTING. ALL SERVICE LINE AND METERS NOTED FOR REPLACEMENT SHALL BE REPLACED WITH SAME AS EXISTING SIZE.
45. OPEN TRENCH URBAN FORESTRY INSPECTIONS -- ALL AREAS DESIGNATED BY THE CITY FORESTER FOR HAND DIGGING REQUIRE INSPECTION BY PARKS & URBAN FORESTRY PRIOR TO BACKFILLING. TO ASSESS THE EXTENT OF ROOT LOSS OR DAMAGE. THE CITY FORESTER MAY ALSO REQUIRE INSPECTION IN CERTAIN AREAS APPROVED FOR EXCAVATION WITH MECHANICAL EQUIPMENT. THE CONTRACTOR MUST PROVIDE PARKS & URBAN FORESTRY A MINIMUM 24 HOURS NOTICE OF ALL PLANNED EXCAVATIONS REQUIRING INSPECTION. ARRANGEMENTS FOR OPEN TRENCH INSPECTION CAN BE MADE BY CALLING DEAN BOWLES, CITY FORESTER, AT 823--4023 OR BY PROVIDING FAX NOTIFICATION (441--5141). SHOULD THE CONTRACTOR BACKFILL ANY OF THESE LOCATIONS PRIOR TO THE CITY FORESTER'S INSPECTION, HE MAY REQUIRE REMOVAL OF THE PLACED BACKFILL AT NO ADDITIONAL COST TO THE CITY.

WORK WITHIN THE PAVEMENT:

46. ALL AREAS DISTURBED BY CONSTRUCTION OR MOBILIZATION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION, UNLESS SPECIFIED OTHERWISE. TEMPORARY PAVEMENT CUTS SHALL BE MAINTAINED WITH 6" OF VDOT No. 21A STONE OR RECYCLED ASPHALT PAVEMENT (RAP). THE CITY WILL ALLOW THE USE OF CRUSHED CONCRETE, UNLESS VDOT No. 21A OR RAP ON A CASE BY CASE BASIS. A GRADATION REPORT IS TO BE PROVIDED AS WELL AS A PROPOSAL FOR REDUCTION IN COST TO THE CITY. ONCE WE HAVE AN AGREEMENT, THE CONTRACTOR CAN MOVE FORWARD WITH THE USE OF CRUSHED CONCRETE. IN THE EVENT THE CITY FINDS MATERIALS IN THE CRUSHED CONCRETE THAT DO NOT COMPLY WITH THE GRADATION REPORT, THE CITY RESERVES THE RIGHT TO REQUIRE No. 21A FOR THE REMAINDER OF THE PROJECT. ALL MATERIALS DESIGNATED AS TEMPORARY SHALL BE COMPACTED AND WATERED ON A DAILY BASIS TO CONTROL DUST.
47. THE CONTRACTOR SHALL CONSTRUCT THE PROJECT IN ACCORDANCE TO THE PAVEMENT PHASING PLAN. AFTER THE PIPE HAS BEEN INSTALLED IN ANY ONE (1) PHASE, THE CONTRACTOR SHALL PERFORM ALL REQUIRED TESTING IN THE PRESENCE OF THE CITY INSPECTOR AND PERMANENTLY PAVE THE ENTIRE PHASE WITHIN ONE (1) MONTH OF COMPLETING THE PIPE INSTALLATION FOR THAT PHASE. DURING THIS TIME, THE CONTRACTOR WILL BE PERMITTED TO COMMENCE WORK IN ONE (1) SUBSEQUENT PHASE; HOWEVER, UNDER NO CIRCUMSTANCE SHALL THE PREVIOUS PHASE REMAIN UNPAVED BEYOND THE ABOVE MENTIONED ONE (1) MONTH PERIOD. COMMENCING WORK IN ADDITIONAL SUBSEQUENT PHASES WILL NOT BE PERMITTED UNTIL PERMANENT PAVING WITHIN THE INITIAL PHASE IS COMPLETED. THEREFORE, THE CONTRACTOR SHALL NOT COMMENCE WORK WITHIN A THIRD SUBSEQUENT PHASE WHILE PAVING IN ANY TWO (2) PHASES REMAINS TO BE COMPLETED. IF THE CONTRACTOR ELECTS TO DIVERT FROM THE CONSULTANTS PHASED PAVING PLAN, THE USE OF 3 INCHES OF BM--25 WITH MINIMUM 6 INCHES OF No. 21A STONE SHALL SUFFICE TO MEET THE ABOVE MENTIONED CONSTRAINTS ONLY IF THE FOLLOWING REQUIREMENTS ARE FULFILLED. THE CONTRACTOR SHALL TEMPORARILY PAVE THE PAVEMENT CUTS WITH BM--25 WITHIN TWO (2) MONTHS OR TWO (2) BLOCKS, WHICHEVER COMES FIRST. THE INSTALLATION AND REMOVAL OF THIS TEMPORARY PAVEMENT SHALL BE PERFORMED AT THE CONTRACTORS SOLE EXPENSE AND BEAR NO ADDITIONAL COST TO THE CITY.
48. ALL ROADWAY CUTS SHALL BE BACKFILLED ONLY WITH SUITABLE SUBBASE MATERIAL, AND MECHANICALLY TAMPED IN NO MORE THAN 6" LIFTS. BACKFILL SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH SECTION 308 OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS, LATEST EDITION. THE CITY MAY, AT ANY TIME, REQUIRE TESTING TO ENSURE COMPLIANCE WITH THE SPECIFICATIONS OF THIS CONTRACT. ALL TESTS WILL BE CONDUCTED BY A RECOGNIZED TESTING LABORATORY SELECTED BY THE CITY, QUALIFIED IN THE FIELD OF THE MATERIALS TO BE TESTED. ALL TESTS WILL BE CONDUCTED IN ACCORDANCE WITH VDOT'S "MANUAL FOR VIRGINIA TEST METHODS" (CURRENT EDITION AS REVISED). PAYMENT FOR ALL TESTS WILL BE IN ACCORDANCE WITH THE FOLLOWING:
- A) THE COST OF ALL TESTS FAILING TO MEET THE MINIMUM REQUIREMENTS WILL BE BORNE BY THE CONTRACTOR

B) THE COST OF ALL TESTS THAT EITHER MEET OR EXCEED THE MINIMUM REQUIREMENTS SHALL BE BORNE BY THE CITY.
49. ARTERIAL STREETS -- AVERAGE DAILY TRAFFIC OVER 15,000 VEHICLES PER DAY. ARTERIAL STREETS ARE THOSE IN THE CITY DESIGNATED AS "MAJOR THOROUGHFARES." BEING ESSENTIAL TO THE SAFE MOVEMENT OF THE MAJORITY OF CITIZENS, THESE STREETS REQUIRE STRICTER REGULATIONS TO MAINTAIN THE ORDERLY AND SAFE FLOW OF TRAFFIC. THEREFORE, NO WORK WILL BE PERFORMED ON ARTERIAL STREETS DURING THE PEAK TRAFFIC HOURS OF 6:00 A.M. TO 9:00 A.M. AND 3:30 P.M. TO 6:00 P.M. (MONDAY THROUGH FRIDAY ONLY), EXCEPT EMERGENCY WORK TO RESTORE SERVICES. LANE CLOSURES WILL BE RESTRICTED TO THE WORKING LANE ONLY AND TWO--WAY TRAFFIC WILL BE MAINTAINED AT ALL TIMES, UNLESS OTHERWISE AUTHORIZED BY THE DIRECTOR OF PUBLIC WORKS OR HIS DESIGNEE. WORK IN XXXXXXXXXXXXXXXX AVE. WILL BE ALLOWED BETWEEN THE HOURS OF XXXAM AND XXXPM.
50. ARTERIALS SHALL BE OPENED TO TRAFFIC EACH NIGHT WITH ALL OPENINGS COVERED BY A ROAD PLATE OR A TEMPORARY ASPHALT PATCH BEFORE LEAVING THE SITE. THE PERMANENT ASPHALT PATCH SHALL BE PLACED THE SAME DAY THE WORK IS COMPLETED FOR MINOR PROJECTS AND WITHIN FIFTEEN (15) CALENDAR DAYS OF COMPLETION FOR MAJOR PROJECTS, UNLESS OTHERWISE DIRECTED. WHEN NOTIFIED BY THE CITY OF AN UNSAFE OPENING, THE RESPONSIBLE PARTY SHALL RESPOND AND REPAIR SAID PATCH WITHIN FOUR (4) HOURS.
51. COLLECTOR STREETS -- AVERAGE DAILY TRAFFIC FROM 5000 TO 15,000 VEHICLES PER DAY (SEE ATTACHMENT C); THESE ARE ALL STREETS WHICH CONNECT RESIDENTIAL STREETS TO ARTERIALS (60"--80" RIGHTS--OF--WAY), WITH TWO LANES OF ALTERNATING TRAFFIC WITH PARKING ON BOTH SIDES OR FOUR LANES OF ALTERNATING TRAFFIC (SEE ATTACHED LISTING). THEREFORE, NO WORK WILL BE PERFORMED ON COLLECTOR STREETS DURING THE PEAK TRAFFIC HOURS, 6:00 A.M. TO 9:00 A.M. AND 3:30 P.M. TO 6:00 P.M. (MONDAY THROUGH FRIDAY ONLY), EXCEPT EMERGENCY WORK TO RESTORE SERVICES. MAIN SUBDIVISION COLLECTORS ARE ESPECIALLY CRITICAL. TWO--WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES, UNLESS OTHERWISE AUTHORIZED BY THE DIRECTOR OF PUBLIC WORKS OR HIS DESIGNEE.
52. ALL UTILITY CUTS IN COLLECTOR STREETS SHALL BE FILLED EACH NIGHT AND COVERED BY A TEMPORARY ASPHALT PATCH IF COMPLETED TOO LATE FOR A PERMANENT ASPHALT REPAIR. THE REPAIR SHALL RECEIVE A PERMANENT ASPHALT PATCH AS SOON AS POSSIBLE BUT NO LATER THAN FIVE (5) CALENDAR DAYS AFTER WORK COMPLETION FOR MINOR PROJECTS, AND WITHIN FIFTEEN (15) CALENDAR DAYS FOR MAJOR PROJECTS, UNLESS OTHERWISE DIRECTED. WHEN NOTIFIED BY THE CITY OF AN UNSAFE OPENING, THE RESPONSIBLE UTILITY CONTRACTOR SHALL RESPOND AND REPAIR SAID PATCH WITHIN FOUR (4) HOURS.
53. RESIDENTIAL STREETS -- AVERAGE DAILY TRAFFIC UNDER 5,000 VEHICLES PER DAY; THESE ARE THOSE STREETS AND CUL--DE--SACS WHICH PROVIDE DIRECT ACCESS TO ADJACENT PROPERTY OR INDIVIDUAL HOMES. NORMALLY TWO ALTERNATING LANES IN A 50' RIGHT--OF--WAY. CONSTRUCTION HOURS SHALL BE LIMITED TO 7:30 A.M. TO 4:30 P.M., TO BE SENSITIVE TO NOISE IMPACTS ON SURROUNDING PROPERTIES (EMERGENCY WORK TO RESTORE SERVICES EXCLUDED). AT LEAST A SINGLE LANE SHALL BE PROVIDED FOR TWO--WAY TRAFFIC WITH A FLAGMAN AVAILABLE FOR CONTROL, UNLESS OTHERWISE AUTHORIZED BY THE DIRECTOR OF PUBLIC WORKS OR HIS DESIGNEE.
54. EXCAVATIONS IN RESIDENTIAL STREETS SHALL BE PROTECTED EACH NIGHT; ALL UTILITY CUTS SHALL BE MAINTAINED DAILY WITH 21A STONE, CRUSHED CONCRETE, CRUSHED ASPHALT, COLD MIX, OR PLANT MIX ASPHALT. THE PERMANENT ASPHALT REPAIR SHALL BE MADE AS SOON AS POSSIBLE BUT NO LATER THAN FIVE (5) DAYS AFTER WORK COMPLETION FOR MINOR PROJECTS AND WITHIN THIRTY (30) CALENDAR DAYS FOR MAJOR PROJECTS. WHEN NOTIFIED BY THE CITY OF AN UNSAFE OPENING, THE RESPONSIBLE PARTY SHALL RESPOND AND REPAIR SAID PATCH WITHIN FOUR (4) HOURS.
55. THE CITY RESERVES THE RIGHT TO EFFECT ANY REQUIRED REPAIRS, AND WARRANT FOR THE COLLECTION FOR ALL ASSOCIATED COSTS, WHERE NECESSITATED BY EMERGENCY CONDITIONS.
56. ALL TEMPORARY BULK WASTE CONTAINERS PLACED WITHIN THE RIGHT OF WAY REQUIRE A PERMIT FROM THE DIVISION OF RIGHT OF WAY 664--7306.
57. "NO LANE CLOSURES AND/OR WORK IN THE RIGHT OF WAY, INCLUDING GRADING, SIDEWALK, CURB AND GUTTER, AND DRIVEWAY APRON INSTALLATION WILL BE ALLOWED WITHOUT A PERMIT FROM THE DIVISION OF RIGHT OF WAY (664--7306). ALL TRAFFIC CONTROL SHALL COMPLY WITH THE CURRENT EDITION OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), THE "VIRGINIA WORK AREA PROTECTION MANUAL" AND THE CITY OF NORFOLK RIGHT OF WAY EXCAVATION AND RESTORATION MANUAL. ADDITIONAL CHARGES APPLY IF OFF--DUTY OFFICERS ARE REQUIRED. A LIST OF PERMIT FEES IS LOCATED AT [www.norfolk.gov/publicworks/row](http://www.norfolk.gov/publicworks/row)
58. THE CONTRACTOR WILL BE REQUIRED TO POST CASH, A CHECK, OR A SURETY BOND OR LETTER OF CREDIT TO EXCAVATE IN THE RIGHT OF WAY.

59. WHEN THE CONTRACTOR WORK REQUIRES THE SAWCUTTING AND/OR PARTIAL DEMOLITION AND/OR REMOVAL OF ANY SECTION OF AN EXISTING APRON OR SIDEWALK, THE CONTRACTOR WILL BE REQUIRED TO REMOVE SAID EXISTING APRON OR SIDEWALK AND REPLACE IT WITH A NEW MONOLITHIC APRON OR SIDEWALK. SIDEWALK SHALL BE REMOVED TO THE NEAREST JOINT. ALL CONCRETE IS TO BE SAW CUT. NO PATCHING WILL BE ALLOWED. COMMERCIAL APRONS SHALL BE REPLACED WITH AN APPROVED COMMERCIAL APRON. RESIDENTIAL APRON SHALL BE REPLACED WITH AN APPROVED RESIDENTIAL APRON(HS--207). SIDEWALKS SHALL BE REPLACED WITH AN APPROVED SIDEWALK DETAIL. CONTACT THE DIVISION OF RIGHT--OF--WAT PERMIT OFFICE FOR APPROVAL 664--7306. (ORDINANCE NO: 40,778)
60. WHEN A NEW APRON AND/OR SIDEWALK ARE INSTALLED, ALL NEW OR EXISTING UTILITY STRUCTURES SHALL BE INSTALLED AND/OR RELOCATED OUTSIDE THE AREA OF THE NEW APRON AND/OR SIDEWALK. A PERMIT AND INSPECTION ARE REQUIRED.
61. AS PART OF THE CONTRACTOR'S PERMIT APPLICATION TO WORK IN THE RIGHT OF WAY, THE CONTRACTOR MUST SUBMIT A MAP IDENTIFYING THE PROJECTS STORAGE AND LAY DOWN AREA. THE CITY DOES NOT ALLOW STORAGE, STAGING OR LAY DOWN AREAS WITHIN THE RIGHT OF WAY. CONTRACTORS ARE ENCOURAGED TO MAKE ARRANGEMENTS TO STORE MATERIALS AND LAY DOWN ON PRIVATE PROPERTY OR THEY MUST BE STORED WITHIN CONSTRUCTION SITE.
62. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A DETAILED TRAFFIC CONTROL PLAN (MOT) WITH THE CONTRACTOR'S PERMIT APPLICATION TO WORK IN THE RIGHT--OF--WAY. THE MOT SHALL BE A DRAWING OR AERIAL PHOTO WITH SITE SPECIFIC DETAILS. THESE SHALL INCLUDE BUT ARE NOT LIMITED TO: TRAFFIC SIGNS, DIRECTIONAL SIGNS, DESTINATION SIGNAGE, CHANNELIZING DEVICES, WATER--FILLED BARRIERS, PORTABLE MESSAGE BOARDS WITH MESSAGES TO BE DISPLAYED AND TIMES AND DURATIONS OF DISPLAYED MESSAGES. ADDITIONALLY THE MOT SHALL DISPLAY THE EXACT LOCATION OF ALL SIGNS AND/OR DEVICES INCLUDING SPACING FOR EACH SIGN AND/OR DEVICES, SPACING BEING APPROPRIATE FOR THE WORK ZONE LOCATION AND POSTED SPEED LIMITS. ALL MAINTENANCE OF TRAFFIC (MOT) PLAN SHALL CONFORM TO THE CURRENT ISSUE OF "THE VIRGINIA WORK AREA PROTECTION MANUAL." COPIES OR REPRODUCTIONS OF THE MOT THAT ARE INCLUDED WITH THE PROJECT DRAWINGS AND SPECIFICATIONS WILL NOT BE ACCEPTED WITH THE CONTRACTOR'S PERMIT APPLICATION. CONTRACTORS SHOULD CONSIDER THESE ITEMS WHEN BIDDING PROJECT FOR CONSTRUCTION.

63. ALL MISS UTILITY MARKINGS IN THE RIGHT--OF--WAY ARE REQUIRED TO BE ERADICATED AT THE COMPLETION OF THE PROJECT.
64. BEFORE WORK COMMENCES WHERE ANY LOOP DETECTOR IS BURIED IN THE ROADWAY, PLEASE CONTACT PANKAJ GUPTA (PG) [Pankaj.gupta@norfolk.gov](mailto:Pankaj.gupta@norfolk.gov) 664--7300 FOR LOOP DETECTOR DETAILS AND SPECIFICATIONS. IF LOOP DETECTORS ARE DAMAGED DURING CONSTRUCTION THE CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRS AND RESTORATION OF THE LOOP DETECTORS AND ANY TRAFFIC CONTROL DEVICES.
65. THE CITY RESERVES THE RIGHT TO STOP WORK ON THE PROJECT IF THE SITE IS NOT BEING KEPT CLEAN AND PROPERLY MAINTAINED.
66. CLAIMS FOR DELAY TIME--ONLY EQUIPMENT WHICH IS BEING USED ON A DAILY BASIS CAN BE INCLUDED ON THE CONTRACTOR'S CLAIM FOR DELAY.
67. THE TAPPING MACHINE USED FOR TAPPING SLEEVES AND VALVES SHALL BE DISINFECTED PRIOR TO USE ON WATER MAINS.
68. AN UP TO DATE AS--BUILT AND PROGRESS SCHEDULE SHALL ACCOMPANY THE CONTRACTOR'S MONTHLY APPLICATION FOR PAYMENT. IF THESE ITEMS ARE NOT INCLUDED WITH THE INVOICE, THE INVOICE SHALL BE IMMEDIATELY RETURNED TO THE CONTRACTOR.
69. ALL MATERIALS PURCHASED FOR THIS PROJECT SHALL BE NEW AND HAVE BEEN MANUFACTURED WITH IN THE LAST TWO (2) YEARS OF THE DATE WHEN THE CONTRACT WAS EXECUTED.
70. ALL NIPPLE PIECES BETWEEN WATER MAIN AND FORCE MAIN FITTINGS AND VALVES SHALL BE CLASS 52 DUCTILE IRON.
71. ALL CURBS, SIDEWALKS, AND CONCRETE APRONS WHICH ARE REMOVED, SHALL BE REPLACED TO THE NEAREST JOINT.
72. CONTRACTOR'S MONTHLY INVOICES SHALL BE REVIEWED BY THE CITY'S INSPECTOR AND CONTRACTOR'S SUPERINTENDENT PRIOR TO SUBMISSION.
73. ALL PRODUCTS USED IN THE CONSTRUCTION AND MAINTENANCE OF THE WATER SYSTEM SHALL MEET THE DEFINITION OF "LEAD--FREE" AS DESCRIBED IN THE REDUCTION OF LEAD IN DRINKING WATER ACT OF 2011.

CITY OF NORFOLK -- DEPARTMENT OF UTILITIES STANDARD DETAILS	SCALE: NOT TO SCALE
	DRAWING NO. GEN 01
DATE: 02/14	